1.    (Amended) An image processing apparatus comprising:

input means for inputting image data of an original image;

discriminating means for extracting a predetermined region by using a feature of pixel of the image data input from the input means, and for discriminating an attribute of the region;

determining means for, on the basis of the distribution of the regions attribute of which discriminated by the discriminating means,

determining the type of the image data as at least one type selected from the group consisting of image data of uniform background, image data of dot background in the entire screen, image data of dot photo only, image data of continuous gradation photo only, image data of which region can be discriminated by rectangle, and image data of which region cannot be discriminated by rectangle; and

means for converting at least one of resolution, compression rate, and number of colors of the image data, depending on the type determined by the determining means.

4.    (Amended) An image processing apparatus according to claim 1, further comprising:

correcting means for correcting the image data by performing at least one of density conversion and filter processing, depending on the type determined by the determining means.

5.    (Amended) An image processing apparatus according to claim 1, further comprising:

changing means for changing the image format of the image data, depending on the type determined by the determining means.

6.    (Amended) An image processing apparatus according to claim 1, further comprising:

processing means for selecting an application of image processing, depending on the type determined by the determining means, setting a

parameter, and starting the application to perform image processing of the image data.

7.     (Amended)   An image processing apparatus according to claim 1, further comprising:

means for performing specified processing on the basis of the attribute of the region discriminated by the discriminating means, on the image data in every region, when the determining result by the determining means is a specified result.

8.     (Amended)   An image processing apparatus according to claim 1, further comprising:

second discriminating means for discriminating the image type of the image data received from the input means in pixel unit, when the determining result by the determining means is a specified result; and

second processing means for processing the image data as specified, on the basis of the result discriminated by the second discriminating means.

9.     (Amended)   An image processing apparatus according to claim 1, further comprising:

setting means for setting for pixel unit discriminating process on the basis of the determining result by the determining means;

second discriminating means for discriminating the image type of the image data received from the input means in pixel unit on the basis of the setting by the setting means, when the determining result by the determining means is a specified result; and

second processing means for processing the image data as specified, on the basis of the result discriminated by the second discriminating means.

10.    (Amended)   An image processing apparatus according to claim 1, further comprising:

second discriminating means for discriminating the image type of the image data received from the input means in pixel unit, when the determining means determines that it takes more than a specified time for determining; and

second processing means for processing the image data as specified, on the basis of the result discriminated by the second discriminating means.

11.    (Amended)    An image processing apparatus according to claim 1, further comprising:

second discriminating means for determining the discrimination precision of the discriminating means, and when the discrimination precision is below a specific value, discriminating the image type of the image data received from the input means in pixel unit; and

second processing means for processing the image data as specified, on the basis of the result discriminated by the second discriminating means.

12.    (Amended)    An image processing apparatus according to claim 1, further comprising:

second discriminating means for determining the complicatedness of the discriminating means, and when the complicatedness is above a specific value, discriminating the image type of the image data received from the input means in pixel unit; and

second processing means for processing the image data as specified, on the basis of the result discriminated by the second discriminating means.

13.    (Amended)    An image processing apparatus according to claim 1, further comprising:

storing means for receiving the image data from the input means, performing a first process on the image data parallel to the determining process of the determining means to obtain a first result, further performing a second process different from the first process to obtain a second result, and storing them in a memory region; and

means for reading out and outputting either one of the first result and second result from the storing means on the basis of the determining result of the determining means.

14. (Amended) An image processing apparatus according to claim 1, further comprising:

means for discriminating the structure of the background from the extracted region, and judging the type of the image data on the basis thereof.

15. (Amended) An image processing apparatus according to claim 1, further comprising:

means for judging presence or absence of character from the distribution of attribute in each region discriminated by the discriminating means, and judging the type of the image data on the basis thereof.

16. (Amended) An image processing apparatus according to claim 1, further comprising:

judging means for judging the type of the image data on the basis of the distribution of the attribute in each region discriminated by the discriminating means; and

processing means for processing the data as specified on the basis of the image data judged by the judging means.

17. (Amended) An image processing apparatus according to claim 1, further comprising:

means for discriminating the page information which is the image type of each page of the original image of the image data when the discriminating means cannot divide the image data into a plurality of rectangular regions, and determining the type of the image data on the basis thereof.

18. (Amended) An image processing apparatus according to claim 1, further comprising:

means for discriminating the page information which is the image type of each page of the original image of the image data when the region extracted by the discriminating means has a complicatedness more than a specific value, and determining the type of the image data on the basis thereof.

19. (Amended) An image processing apparatus according to claim 1, further comprising:

judging means for judging the type of the image data, regardless of the content of the original mode given from the user, on the basis of the distribution of the attribute of each region discriminated by the discriminating means.

20. (Amended) An image processing apparatus according to claim 1, further comprising:

second discriminating means for discriminating the image information of the image data received from the input means in the pixel unit according to the judging result when the judging result by the judging means is the specified result; and

second processing means for processing the image data as specified on the basis of the discrimination result discriminated by the second discriminating means.

22. (Amended) An image processing method comprising:

inputting step of inputting image data of an original image;

discriminating step of extracting a predetermined region by using a feature of pixel of the image data input at the input step, and for discriminating an attribute of the region;

determining step of determining the type of the image data on the basis of the distribution of the attributes of the regions discriminated at the discriminating step as at least one type selected from the group consisting of image data of uniform background, image data of dot background in the entire screen, image data of dot photo only, image data of continuous gradation photo

only, image data of which region can be discriminated by rectangle, and image data of which region cannot be discriminated by rectangle; and

converting step of converting at least one of resolution, compression rate, and number of colors of the image data, depending on the type determined at the determining step.

25. (Amended) An image processing method according to claim 22, further comprising:

correcting step of correcting the image data by performing at least one of density conversion and filter processing, depending on the type determined at the determining step.

26. (Amended) An image processing method according to claim 22, further comprising:

changing step of changing the image format of the image data, depending on the type determined at the determining step.

27. (Amended) An image processing method according to claim 22, further comprising:

processing step of selecting an application of image processing, depending on the type determined at the determining step, setting a parameter, and starting the application to perform image processing of the image data.

28. (Amended) An image processing method according to claim 22, further comprising:

step of performing specified processing on the basis of the attribute of the region discriminated at the discriminating step, on the image data in every region, when the determining result at the determining step is a specified result.

29. (Amended) An image processing method according to claim 22, further comprising:

second discriminating step of discriminating the image type of the image data received from the input step in pixel unit, when the determining result at the determining step is a specified result; and

second processing step of processing the image data as specified, on the basis of the result discriminated at the second discriminating step.

30.     (Amended)  An image processing method according to claim 22, further comprising:

setting step of setting for pixel unit discriminating process on the basis of the determining result at the determining step;

second discriminating step of discriminating the image type of the image data received from the input step in pixel unit on the basis of the setting at the setting step, when the determining result at the determining step is a specified result; and

second processing step of processing the image data as specified, on the basis of the result discriminated at the second discriminating step.

31.     (Amended)  An image processing method according to claim 22, further comprising:

second discriminating step of discriminating the image type of the image data received from the input step in pixel unit, when it is determined that it takes more than a specified time for determining at the determining step; and

second processing step of processing the image data as specified, on the basis of the result discriminated at the second discriminating step.

32.     (Amended)  An image processing method according to claim 22, further comprising:

second discriminating step of determining the discrimination precision at the discriminating step, and when the discrimination precision is below a specific value, discriminating the image type of the image data received from the input step in pixel unit; and

second processing step of processing the image data as specified, on the basis of the result discriminated at the second discriminating step.

33.    (Amended)  An image processing method according to claim 22, further comprising:

second discriminating step of determining the complicatedness at the discriminating step, and when the complicatedness is above a specific value,

discriminating the image type of the image data received from the input step in pixel unit; and

second processing step of processing the image data as specified, on the basis of the result discriminated at the second discriminating step.

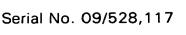34.    (Amended)  An image processing method according to claim 22, further comprising:

storing step of receiving the image data from the input step, performing a first process on the image data parallel to the determining process at the determining step to obtain a first result, further performing a second process different from the first process to obtain a second result, and storing them in a memory region; and

step of reading out and outputting either one of the first result and second result stored at the storing step on the basis of the determining result at the determining step.

35.    (Amended)  An image processing method according to claim 22, further comprising:

step of discriminating the structure of the background from the extracted region, and judging the type of the image data on the basis thereof.

36.    (Amended)  An image processing method according to claim 22, further comprising:

step of judging presence or absence of character from the distribution of attribute in each region discriminated at the discriminating step, and judging the type of the image data on the basis thereof.

37.    (Amended)  An image processing method according to claim 22, further comprising:

judging the type of the image data on the basis of the distribution of the attribute in each region discriminated at the discriminating step; and

processing the data as specified on the basis of the type of the image data judged at the judging step.

38.    (Amended)  An image processing method according to claim 22, further comprising:

step of discriminating the page information which is the image type of each page of the original image of the image data when the discriminating step cannot divide the image data into a plurality of rectangular regions, and determining the type of the image data on the basis thereof.

39.    (Amended)  An image processing method according to claim 22, further comprising:

step of discriminating the page information which is the image type of each page of the original image of the image data when the region extracted at the discriminating step has a complicatedness more than a specific value, and determining the type of the image data on the basis thereof.

40.    (Amended)  An image processing method according to claim 22, further comprising a judging step of judging the type of the image data, regardless of the content of the original mode given from the user, on the basis of the distribution of the attribute of each region discriminated at the discriminating step.

41.    (Amended)  An image processing method according to claim 22, further comprising:

second discriminating step of discriminating the image information of the image data received from the input means in the pixel unit according to the judging result when the judging result at the judging step is the specified result; and

second processing step of processing the image data as specified on the basis of the discrimination result discriminated at the second discriminating step.

Please add the following new claim 42:

42.    (New)         An image processing apparatus comprising:

input means for inputting image data of an original image;

discriminating means for extracting a predetermined region by using a feature of pixel of the image data input from the input means, and for discriminating an attribute of the region;

determining means for, on the basis of the distribution of the regions attribute of which discriminated by the discriminating means, determining the type of the image data as at least one type selected from the group consisting of image data of uniform background, image data of dot background in the entire screen, image data of dot photo only, image data of continuous gradation photo only, image data of which region can be discriminated by rectangle, and image data of which region cannot be discriminated by rectangle;

means for converting at least one of resolution, compression rate, and number of colors of the image data, depending on the type determined by the determining means; and

image forming means for forming an image on a recording medium on the basis of the image data processed as specified by the converting means.